

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/674,774	NEIL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Carlos Lopez	1731	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/11/05.
2. ☒ The allowed claim(s) is/are 23-33.
3. ☒ The drawings filed on 30 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                 |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>1/11/05</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                        |
|   | 9. <input type="checkbox"/> Other _____.  |

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Clark on 1/11/05. The application has been amended as follows:

In the title:

~~Ceramic Arc Tube Assembly and Method of Making Tube~~ Ceramic Arc Tube

In the specification the paragraph in page 1 at line 7 was rewritten to read as follows:

~~This application claims the benefit of U.S. Provisional Application No. 60/271,153, filed 2/23/01.~~ This application is a division **divisional** of co-pending **US Application** application Serial No. 09/964,052, filed 9/26/2001, **now US Patent 6,731,066, which claims the benefit of U.S. Provisional Application No. 60/271,153, filed 2/23/01.**

The following claims were amended to read as follows:

23. (Currently Amended) A method of making a ceramic arc tube comprising the steps of:

(a) fixing a transient assembly button around a capillary tube to form an end cap;

Art Unit: 1731

- (b) **forming an arc tube assembly by** inserting the end cap into an open end of a hollow arc tube body until the transient assembly button contacts an edge of the open end;
- (c) heating the **arc tube** assembly to form a mechanical seal between the capillary tube and the open end of the hollow body;
- (d) removing the transient assembly button without damaging the **arc tube** assembly;
- and
- (e) sintering the **arc tube** assembly to form the ceramic arc tube.

25. (Currently Amended) The method of claim 23 wherein the **arc tube** assembly is heated at or below about 1350<sup>0</sup>C to form the mechanical seal.

27. (Currently Amended) The method of claim 25 wherein the **arc tube** assembly is sintered at a temperature above about 1800<sup>0</sup>C in a hydrogen-containing atmosphere.

28. (Currently Amended) A method of making a ceramic arc tube comprising the steps of:

- (a) fixing a transient assembly button and a sealing member around a capillary tube to form an end cap;
- (b) **forming an arc tube assembly by** inserting the sealing member of end cap into an open end of a hollow arc tube body until the transient assembly button contacts an edge of the open end;

Art Unit: 1731

- (c) heating the arc tube assembly to form a mechanical seal between the sealing member and the open end of the hollow body;
- (d) removing the transient assembly button without damaging the arc tube assembly; and
- (e) sintering the arc tube assembly to form the ceramic arc tube.

30. (Currently Amended) The method of claim 29 wherein the arc tube assembly is heated at or below about 1350<sup>0</sup>C to form the mechanical seal.

31. (Currently Amended) The method of claim 30 wherein the arc tube assembly is sintered at a temperature above about 1800<sup>0</sup>C in a hydrogen-containing atmosphere.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: the cited prior art fails to disclose or reasonably suggest a method of making a ceramic arc tube comprising the steps fixing a transient assembly button around a capillary tube to form an end cap, forming an arc tube assembly by inserting the end cap into an open end of a hollow arc tube body until the transient assembly button contacts an edge of the open end, heating the arc tube assembly to form a mechanical seal between the capillary tube and the open end of the hollow body in combination with removing the transient assembly button without damaging the arc tube assembly as recited in instant claim 23. Additionally the cited prior art fails to disclose or reasonably suggest a method of making a ceramic arc tube comprising the steps of fixing a transient assembly button

Art Unit: 1731

and a sealing member around a capillary tube to form an end cap, forming an arc tube assembly by inserting the sealing member of end cap into an open end of a hollow arc tube body until the transient assembly button contacts an edge of the open end, in combination with removing the transient assembly button without damaging the arc tube assembly as recited in claim 28.

The closest prior art such as EP 1006552 A1 or US 5725827 do provide sealing member of an arc tube assembly but fail to disclose or reasonably suggest using a transient assembly button when sealing an arc tube and removing the transient assembly button without damaging the arc tube assembly.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **CONCLUSION**

The references in PTO-892 have been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CL

  
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